

## 10145400 SALT CREEK BELOW NEPHI POWERPLANT DIVERSION, NEAR NEPHI, UT

LOCATION.--Lat 39°43'02", long 111°43'58", in SE<sup>1/4</sup>/SW<sup>1/4</sup>/NW<sup>1/4</sup> sec. 5, T. 13 S., R. 2 E., Juab County, Hydrologic Unit 16020201, on right bank 5.6 mi east of Nephi, 0.2 mi below confluence with Hopp Creek, 200 ft downstream from Nephi powerplant Diversion Dam, and 115 ft below mouth of Bradley's Canyon.

DRAINAGE AREA.--60.0 mi<sup>2</sup>.

PERIOD OF RECORD.--September 1993 to current year.

GAGE.--Water-stage recorder. Elevation of gage is 5750 ft above sea level, from topographic map.

REMARKS.--Records good. Flow at gage is extensively regulated by Nephi City at powerplant Diversion Dam 200 ft above gage.

EXTREMES FOR PERIOD OF RECORD.--Maximum discharge, 263 ft<sup>3</sup>/s, May 1, 1998, gage height, 6.34 ft; minimum daily discharge, 2.0 ft<sup>3</sup>/s, Dec 25-29, 1994.

EXTREMES FOR CURRENT YEAR.--Maximum discharge, 41 ft<sup>3</sup>/s, May 18, gage height, 5.24 ft; minimum daily discharge, 3.2 ft<sup>3</sup>/s, on several days in Jan, Feb.

DISCHARGE, CUBIC FEET PER SECOND, WATER YEAR OCTOBER 2000 TO SEPTEMBER 2001  
DAILY MEAN VALUES

| DAY   | OCT   | NOV   | DEC   | JAN   | FEB  | MAR   | APR   | MAY   | JUN   | JUL   | AUG   | SEP   |
|-------|-------|-------|-------|-------|------|-------|-------|-------|-------|-------|-------|-------|
| 1     | 5.5   | 3.9   | 3.6   | 3.4   | 3.4  | 3.5   | 6.5   | 24    | 30    | 5.9   | 5.8   | 4.7   |
| 2     | 5.5   | 3.9   | 3.6   | 3.4   | 3.2  | 3.6   | 6.5   | 23    | 30    | 6.0   | 5.4   | 4.3   |
| 3     | 5.1   | 3.9   | 3.6   | 3.4   | 3.2  | 3.6   | 6.3   | 17    | 28    | 6.1   | 5.5   | 4.1   |
| 4     | 4.8   | 3.8   | 3.8   | 3.4   | 3.2  | 3.6   | 6.2   | 12    | 26    | 5.9   | 5.7   | 3.9   |
| 5     | 4.7   | 3.8   | 3.6   | 3.4   | 3.2  | 3.6   | 6.2   | 9.1   | 22    | 5.7   | 5.1   | 3.9   |
| 6     | 4.7   | 3.8   | 3.7   | 3.4   | 3.2  | 3.6   | 6.2   | 7.4   | 21    | 5.9   | 5.0   | 3.9   |
| 7     | 4.9   | 3.8   | 3.6   | 3.4   | 3.2  | 3.6   | 6.2   | 7.3   | 21    | 5.8   | 5.0   | 4.1   |
| 8     | 5.0   | 3.8   | 3.6   | 3.4   | 3.2  | 3.6   | 6.2   | 9.0   | 14    | 5.4   | 5.0   | 4.5   |
| 9     | 5.2   | 3.8   | 3.6   | 3.4   | 3.2  | 3.6   | 6.2   | 13    | 6.5   | 5.6   | 4.9   | 4.5   |
| 10    | 6.1   | 3.9   | 3.6   | 3.4   | 3.2  | 3.6   | 6.2   | 20    | 6.6   | 5.4   | 5.0   | 4.3   |
| 11    | 6.6   | 3.9   | 3.6   | 3.4   | 3.2  | 3.6   | 6.2   | 27    | 6.7   | 5.9   | 4.9   | 4.3   |
| 12    | 6.8   | 3.9   | 3.6   | 3.4   | 3.2  | 3.6   | 6.1   | 28    | 6.8   | 6.2   | 4.9   | 4.6   |
| 13    | 6.8   | 3.9   | 3.6   | 3.4   | 3.3  | 3.6   | 6.0   | 31    | 7.0   | 6.2   | 5.4   | 4.8   |
| 14    | 6.8   | 3.9   | 3.6   | 3.4   | 3.4  | 3.6   | 6.1   | 29    | 7.0   | 6.4   | 5.5   | 4.7   |
| 15    | 6.8   | 3.9   | 3.6   | 3.4   | 3.4  | 3.6   | 6.1   | 30    | 7.0   | 7.0   | 5.0   | 4.9   |
| 16    | 5.3   | 3.9   | 3.6   | 3.4   | 3.4  | 3.7   | 6.2   | 29    | 6.8   | 6.5   | 5.0   | 5.0   |
| 17    | 3.8   | 3.9   | 3.6   | 3.3   | 3.4  | 3.8   | 6.2   | 34    | 6.8   | 6.6   | 5.0   | 5.2   |
| 18    | 3.7   | 4.6   | 3.5   | 3.3   | 3.4  | 3.6   | 6.3   | 33    | 6.7   | 6.8   | 4.8   | 5.5   |
| 19    | 3.6   | 4.5   | 3.5   | 3.2   | 3.5  | 3.6   | 7.7   | 35    | 6.8   | 6.8   | 4.7   | 5.2   |
| 20    | 3.5   | 4.1   | 3.4   | 3.2   | 3.6  | 3.6   | 8.9   | 29    | 6.4   | 6.8   | 4.8   | 4.8   |
| 21    | 3.6   | 3.9   | 3.4   | 3.2   | 3.4  | 3.6   | 7.2   | 24    | 6.2   | 6.8   | 5.5   | 4.9   |
| 22    | 3.6   | 3.9   | 3.4   | 3.2   | 3.4  | 3.6   | 6.6   | 19    | 6.5   | 6.8   | 5.5   | 4.7   |
| 23    | 3.6   | 3.9   | 3.4   | 3.2   | 3.5  | 3.6   | 6.3   | 17    | 6.5   | 7.2   | 5.2   | 4.8   |
| 24    | 3.6   | 3.9   | 3.4   | 3.2   | 3.5  | 3.6   | 6.3   | 17    | 6.5   | 7.4   | 5.1   | 4.8   |
| 25    | 3.6   | 3.7   | 3.4   | 3.2   | 3.6  | 3.6   | 6.8   | 18    | 6.5   | 7.5   | 5.0   | 4.8   |
| 26    | 3.7   | 3.6   | 3.4   | 3.2   | 3.6  | 3.6   | 9.0   | 19    | 6.5   | 7.5   | 4.7   | 4.8   |
| 27    | 3.8   | 3.6   | 3.4   | 3.2   | 3.5  | 3.6   | 13    | 19    | 6.3   | 7.4   | 4.7   | 4.9   |
| 28    | 3.8   | 3.6   | 3.4   | 3.2   | 3.5  | 3.6   | 16    | 17    | 6.2   | 7.0   | 4.7   | 5.0   |
| 29    | 3.8   | 3.6   | 3.4   | 3.2   | ---  | 3.7   | 22    | 14    | 6.2   | 6.8   | 4.7   | 4.9   |
| 30    | 3.9   | 3.6   | 3.4   | 3.2   | ---  | 5.4   | 22    | 20    | 6.2   | 6.1   | 4.8   | 5.1   |
| 31    | 3.9   | --    | 3.4   | 3.8   | ---  | 6.5   | ---   | 31    | --    | 6.0   | 4.8   | --    |
| TOTAL | 146.1 | 116.2 | 109.3 | 103.2 | 94.0 | 116.6 | 243.7 | 661.8 | 336.7 | 199.4 | 157.1 | 139.9 |
| MEAN  | 4.71  | 3.87  | 3.53  | 3.33  | 3.36 | 3.76  | 8.12  | 21.3  | 11.2  | 6.43  | 5.07  | 4.66  |
| MAX   | 6.8   | 4.6   | 3.8   | 3.8   | 3.6  | 6.5   | 22    | 35    | 30    | 7.5   | 5.8   | 5.5   |
| MIN   | 3.5   | 3.6   | 3.4   | 3.2   | 3.2  | 3.5   | 6.0   | 7.3   | 6.2   | 5.4   | 4.7   | 3.9   |
| AC-FT | 290   | 230   | 217   | 205   | 186  | 231   | 483   | 1310  | 668   | 396   | 312   | 277   |

## STATISTICS OF MONTHLY MEAN DATA FOR WATER YEARS 1994 - 2001, BY WATER YEAR (WY)

|      |      |      |      |      |      |      |      |      |      |      |      |      |
|------|------|------|------|------|------|------|------|------|------|------|------|------|
| MEAN | 4.68 | 4.47 | 3.83 | 3.53 | 3.71 | 10.7 | 27.3 | 56.6 | 41.4 | 17.1 | 8.11 | 7.92 |
| MAX  | 6.73 | 6.94 | 6.03 | 3.92 | 3.91 | 28.8 | 60.6 | 102  | 88.6 | 47.5 | 10.2 | 10.4 |
| (WY) | 1995 | 1995 | 1995 | 1995 | 1998 | 1997 | 1997 | 1998 | 1995 | 1995 | 1998 | 1999 |
| MIN  | 2.80 | 3.23 | 2.30 | 2.94 | 3.36 | 3.46 | 8.12 | 20.2 | 8.42 | 5.94 | 5.07 | 4.66 |
| (WY) | 1994 | 1994 | 1994 | 1994 | 2001 | 1994 | 2001 | 1994 | 1994 | 2000 | 2001 | 2001 |

| SUMMARY STATISTICS       |  |  | FOR 2000 CALENDAR YEAR |  |  | FOR 2001 WATER YEAR |  |  | WATER YEARS 1994 - 2001 |  |  |
|--------------------------|--|--|------------------------|--|--|---------------------|--|--|-------------------------|--|--|
| ANNUAL TOTAL             |  |  | 2800.4                 |  |  | 2424.0              |  |  | 15.8                    |  |  |
| ANNUAL MEAN              |  |  | 7.65                   |  |  | 6.64                |  |  | 27.9                    |  |  |
| HIGHEST ANNUAL MEAN      |  |  |                        |  |  |                     |  |  | 6.37                    |  |  |
| LOWEST ANNUAL MEAN       |  |  |                        |  |  |                     |  |  | 208                     |  |  |
| HIGHEST DAILY MEAN       |  |  | 54                     |  |  | May 25              |  |  | May 1                   |  |  |
| LOWEST DAILY MEAN        |  |  | 3.4                    |  |  | Dec 20              |  |  | 1998                    |  |  |
| ANNUAL SEVEN-DAY MINIMUM |  |  | 3.4                    |  |  | Dec 20              |  |  | 2.0                     |  |  |
| ANNUAL RUNOFF (AC-FT)    |  |  | 5550                   |  |  | 4810                |  |  | Dec 26                  |  |  |
| 10 PERCENT EXCEEDS       |  |  | 15                     |  |  | 13                  |  |  | 1993                    |  |  |
| 50 PERCENT EXCEEDS       |  |  | 5.3                    |  |  | 4.7                 |  |  | Dec 22                  |  |  |
| 90 PERCENT EXCEEDS       |  |  | 3.6                    |  |  | 3.4                 |  |  | 1993                    |  |  |